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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/758,836

01/10/2001

Rick V. Murakami

36360/1.9

9796

32642 7590 07/23/2008

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EXAMINER

NGUYEN, NAM V

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

07/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/758,836	Applicant(s) MURAKAMI ET AL.	
	Examiner Nam V. Nguyen	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 23, 24 and 27-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 23-24 and 27-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/14/08; 3/28/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to applicant's Amendment which is filed April 28, 2008 by a request for continued examination.

An amendment to the claims 1-27 has been entered and made of record in the application of Murakami et al. for a "device using histological and physiological biometric marker for authentication and activation."

Claims 21-22 and 25-26 are cancelled. A new set of claims 28-34 are introduced.

Claims 1-20, 23-24 and 27-34 are now pending in the application.

Response to Arguments

Applicant's arguments with respect to claims 1-20, 23-24 and 27-34, filed April 28, 2008 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-16, 20, 23-24 and 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lofberg (US# 4,582,985) in view of Schneider et al. (US# 5,456,256).

Referring to Claims 1-3, 12-13 and 16, Lofberg discloses the biometrically activated device (1) (i.e. a data carrier) (column 3 lines 41 to 65; see Figure 1) comprising:

a biometric sensor device (2) for obtaining heat transmission from the finger of a user to a sensing device from which an internal biometric marker of said user may be determined (column 7 lines 8 to 24; see Figures 1-4), said biometric sensor (2) comprising:

- a transmitter LED (45),

- a photo transistor (46) (column 7 lines 49 to column 8 line 29; see Figure 4), and

wherein said biometric sensor device (2) further comprises a switch (10) on the sensing elements of the sensing matrix 9' (column 5 lines 11 to 29; see Figures 1 and 4).

a memory (6) in communication with said biometric sensor comprising a biometric profile of an authorized user of said device.

However, Lofberg did not explicitly disclose a biometric sensor configured to obtain an internal, sub-dermal physiological characteristic of a user from which an internal, sub-dermal biometric marker of said user may be determined.

In the same field of endeavor a biometric verification system, Schneider et al. disclose a probe assembly (12) (i.e. a biometric sensor) configured to obtain an internal, sub-dermal physiological characteristic of a user from which an internal, sub-dermal biometric marker of

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said user may be determined (column 5 lines 7 to 32; see Figures 1 to 5) in order to improve delay and comfort to the individual.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using probe assembly to measure subdermal biometric structure of a user taught by Schneider et al. in a data carrier that exchange of data with terminal equipment of Lofberg because using a prove assembly to measure subdermal for verification of a biometrical data would increase quality and minimize delay and inconvenience to the user.

Referring to Claims 5-8 and 14-15, Lofberg in view of Schneider et al. discloses the biometrically activated device of Claims 2 and 12, Lofberg discloses wherein said a light-emitting diodes (45) and a photo-transistor (46) arranged to transmit and to receive reflected light to measure the internal physiological characteristic of said human (column 7 line 49 to column 8 line 29; see Figure 4).

Referring to Claim 9, Lofberg in view of Schneider et al. discloses the biometrically activated device of Claim 1, Schneider et al. disclose wherein said energy emitter emits ultrasonic energy (column 3 lines 31 to 52; see Figure 1).

Referring to Claim 10, Lofberg in view of Schneider et al. discloses the biometrically activated device of Claim 1, Lofberg discloses wherein said memory (6) includes reference bit sequence to activate an LED (7) (column 5 lines 30 to 44; see Figure 1).

Referring to Claim 11, Lofberg in view of Schneider et al. discloses a biometrically activated card, to the extent as claimed with respect to claims 1 to 3 above, and further include a signal processor in communication with said biometric sensor device (2) for converting said received signal into an electrical signal (column 4 lines 42 to 53; see Figure 1).

Referring to Claim 20, Lofberg in view of Schneider et al. discloses a method of electromagnetically detecting and comparing an unique internal human biometric marker, to the extent as claimed with respect to claim 11 above, and further include comparing said electrical impulse with said pre-existing stored data (column 5 lines 30 to 38; see Figure 1).

Referring to Claim 23-24, Lofberg in view of Schneider et al. discloses a method of activating an electrical device, to the extent as claimed with respect to claim 20 above, and further include activating an electrical device (7) (i.e. an indicator) to generate a green radiation signal (i.e. a coded signal) if said user biometric profile matches at least one stored biometric profile (column 5 lines 30 to 38; see Figure 1).

Referring to Claims 27-32, Lofberg in view of Schneider et al. discloses the biometrically activated device of Claims 1 and 11, Schneider et al. disclose wherein said internal, sub-dermal biometric marker internal physiological characteristic corresponds to sub-dermal layer analysis (column 4 lines 12 to 49).

Referring to Claims 33-34, Lofberg in view of Schneider et al. discloses the biometrically activated device of Claim 32, Schneider et al. disclose plurality of specular reflection due to plurality of platen surfaces (see Figures 14 and 15); and authenticating said user if said first biometric marker and said second biometric marker correspond to said biometric profile of said authorized user of said device (column 23 lines 35 to 65; see Figure 28).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lofberg (US# 4,582,985) in view of Schneider et al. (US# 5,456,256) as applied to Claim 1, and further in view of Hiramatsu (US# 5,180,901).

Referring to claim 4, Lofberg in view of Schneider et al. discloses the biometrically activated device of Claims 1, however, Lofberg in view of Schneider et al. did not explicitly disclose wherein said biometric sensor further comprises a translator whereby signals received from said energy sensor are translated into a biometric profile.

In the same field of endeavor of self-contained card, Hiramatsu discloses the authenticity sensor (3) connects to an analog/digital converter (4) and authenticity detecting circuit (5) to convert received signal to obtain characteristic of the finger (column 6 line 5 to column 7 line 15; see Figures 7 to 16) for verification of an authentication of a live finger.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using an analog/digital converter and authenticity detecting circuit to convert the biometric signal from the authenticity sensor taught by Hiramatsu in a data carrier that exchange of data with terminal equipment of Lofberg in view of Schneider et al. because using

analog/digital converter and authenticity detecting circuit to convert the biometric signal from the authenticity sensor for verification of a biometrical data would increase security and reliable communication of exchanging information data.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lofberg (US# 4,582,985) in view of Schneider et al. (US# 5,456,256) and in view of Pavlov et al. (US# 4,614,861).

Referring to claim 17, Lofberg in view of Schneider et al. discloses a biometrically activated card, to the extent as claimed with respect to claim 1 above, however, Lofberg in view of Schneider et al. did not explicitly disclose a data communicator embedded within said second surface of said card, said data communicator in communication with said memory module for communicating data to an external source.

In the same field of endeavor of self-contained card, Pavlov et al. teach that an input/output port (36) to communicate with a semiconductor data memory of microprocessor 34 to communicate data with a programming machine 90 (column 9 line 11 to 23; column 13 line 44 to 68; see Figures 3-6 and 9) in order to read confidential and non-confidential information which has been stored on the self-contained verification card.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using an input/output port to communicate information data with external source taught by Pavlov et al. in a data carrier that exchange of data with terminal equipment of Lofberg in view of Schneider et al. because using input/output port to exchange data between

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data carrier and terminal equipment would increase security and reliable communication of exchanging information data.

Referring to claim 18, Lofberg in view of Schneider et al. and in view of Pavlov et al. disclose the biometrically activated card of claim 17, Pavlov et al. disclose a liquid crystal display (14) embedded between card top surfaces 48 and card backing 40 and connect to microprocessor 34 (column 10 lines 8 to 18; column 11 lines 4 to 16; column see Figures 3 and 5).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al. (US# 4,582,985) in view of Lofberg (US# 4,582,985) and in view of Schneider et al. (US# 5,456,256).

Referring to claim 19, Schmitt et al. discloses a biometrically activated portable telecommunication device (190) (column 3 lines 17 to 30; see Figures 14-15),

the portable telecommunication device (190) having an activated state and an inactivated state controlled by an activation switch (i.e. a power control means) (column 6 lines 46 to 64; see Figure 4);

a biometric sensor (30) embedded within said the portable telecommunication device (190) and the biometric sensor on surface of said the portable telecommunication device (column 13 lines 57 to 62; see Figures 14-15);

a fingerprint ID stored memory (208) embedded within the portable telecommunication device (190), said the fingerprint ID stored memory (208) in communication with the biometric sensor (30) and the power control means (column 13 lines 46 to 62; see Figures 4 and 14-15).

However, Schmitt et al. did not explicitly disclose a biometric sensor having an energy transmitter and an energy receiver, configured to measure an internal, sub-dermal physiological characteristic of a user from which an internal sub-dermal biometric marker of said user may be determined.

In the same field of endeavor of data carrier, Lofberg teach that a biometric sensor having an energy transmitter and an energy receiver (column 7 line 49 to column 8 line 29; see Figure 4) in order to sense biometric of a user.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a biometric sensor in a data carrier taught by Lofberg. in a biometric sensor of a cellular telephone of Schmitt et al. because using a biometric sensor having an energy transmitter and an energy receiver would increase reliable of sensing biometric of a user.

However, Schmitt et al. and Lofberg did not explicitly disclose a biometric sensor configured to obtain an internal, sub-dermal physiological characteristic of a user from which an internal, sub-dermal biometric marker of said user may be determined.

In the same field of endeavor a biometric verification system, Schneider et al. close a probe assembly (12) (i.e. a biometric sensor) configured to obtain an internal, sub-dermal physiological characteristic of a user from which an internal, sub-dermal biometric marker of said user may be determined (column 5 lines 7 to 32; see Figures 1 to 5) in order to improve delay and comfort to the individual.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using probe assembly to measure subdermal biometric structure of a user taught by Schneider et al. in a portable telecommunication device including a fingerprint sensor of Schmitt et al. in view of Lofberg because using a prove assembly to measure subdermal for verification of a biometrical data would increase quality and minimize delay and inconvenience to the user.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. (US# 5,982,914) disclose an identification of individuals from association of finger pores and macrofeatures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N. V. N./
Examiner, Art Unit 2612

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612